OCCIDENTAL CHEMICAL CORPORATION

HOOKER Industrial & Specialty Chemicals

MATERIAL SAFETY DATA SHEET

MAR 2 9 1985

DPM 957-1

Supp. by Jones Chemicals

I. Product Information

PRODUCT NAME: Sodium Hydroxide, 50% Liquid

CAS REGISTRY NO.: 1310-73-2

COMMON NAME OR SYNONYM: Caustic Soda, Lye

CHEMICAL FAMILY: Alkali

CHEMICAL NAME: Sodium Hydroxide

CHEMICAL FORMULA: NaOH

II. Health Data

FIRST AID MEASURES:

Eyes: Immediately flush eyes with a directed stream of water for at least 15 minutes, while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. GET MEDICAL ATTENTION.

Skin: Immediately remove contaminated clothing and shoes. Flush skin thoroughly with cool water for at least 15 minutes. Wash clothing before reuse. Discard non-rubber shoes.

Ingestion: Do not induce vomiting; dilute by drinking large quantities of water; if vomiting occurs, administer more water. GET MEDICAL ATTENTION.

EFFECTS OF OVEREXPOSURE:

Acute: Contact with eyes will cause severe burns and possible blindness. Contact with skin will cause painful burns with deep ulceration & ultimate scarring.

Chronic: Local: repeated contact will cause burns & scars
Systemic: unknown

Route: Can effect the body if inhaled as mist or if the liquid comes in contact with the eyes and skin or if swallowed.

Toxicity: Has a markedly corrosive action on all body tissue. Can cause irritant dermatitis.

Emergency Telephone Number Available 24 Hrs./Day 1-716-278-7021

III. Fire And Explosion Hazard Data

FLASH POINT: None
METHOD:

FLAMMABLE LIMITS:
(In Air % by Vol.)
Lower —— **Upper** ——

AUTO IGNITION TEMPERATURE: None

EXTINGUISHING MEDIA: Not combustible

SPECIAL FIRE FIGHTING PROCEDURE & PERSONAL PROTECTION: Use agents and equipment as suitable for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

IV. Special Protection

VENTILATION: Not usually required for caustic solutions. Avoid creation of mist or spray. If present wear appropriate safety clothing.

RESPIRATORY: (Type) Mist protection where applicable

GLOVES: (Type) Rubber, neoprene or vinyl

EYE PROTECTION: (Type) Chemical goggles and face shield.

OTHER PROTECTIVE EQUIPMENT: Rubber or neoprene suits, rubber shoes or boots and plastic hard hat with brim.

V. Physical Data

BOILING POINT 760 mm Hg: 293°F

VAPOR PRESSURE mm Hg 20°C: 1

VAPOR DENSITY (Air = 1):

SOLUBILITY IN WATER: (% by WT.) Infinite

SPECIFIC GRAVITY (H_2O = 1): 1.541 @ 60°F/60°F

pH:

PERCENT VOLATILE: (By Volume)

EVAPORATION RATE: (Butyl Acetate = 1)

OTHER:

APPEARANCE AND COLOR: Water white to slightly gray and turbid, odorless solution.

VI. Hazardous Ingredients

INGREDIENTS PRESENTING A SIGNIFICANT HAZARD	%	THRESHOLD LIMIT VALUE (See Section XI)
Sodium Hydroxide	50	2 mg/m³

VII. Hazardous Reactivity

INCOMPATIBILITY: Reacts vigorously with: strong acids; aluminum, tin, zinc liberating hydrogen; trichloroethylene, forming spontaneously flammable phosphine.

HAZARDOUS DECOMPOSITION PRODUCTS: Flammable gas (hydrogen) may be produced on contact with metals

CONDITIONS TO AVOID: Overheating in storage accelerates corrosion. Store separately from materials which can react with caustic; especially acids, chlorocarbons, nitro paraffins and phosphorus. When diluting, use agitation and add concentrated caustic to water at a controlled rate to control heat of dilution & to avoid splattering. Do not add water to sodium hydroxide.

VIII. Handling And Storage

HANDLING AND STORAGE PRECAUTIONS:

Wear complete protective equipment. Storage tanks must be vented and diked. Storage area for drums should have adequate drainage.

IX. Environmental Protection

PROCEDURE IN CASE OF SPILL OR RELEASE:

Wear protective equipment. Avoid personal contact. Contain spill if possible; if not, dilute and flush with water. Following flushing, neutralize with dilute acid, preferably acetic. In some locations a liberal covering of sodium bicarbonate may be used. In case spill enters sewer system or stream notify sewer authorities and/or pollution control authorities. Report all spills of 1000 lbs. or more.

WASTE DISPOSAL METHOD:

Dispose in approved chemical disposal area or in a manner which complies with all local, state and federal regulations. Do not flush to sewer.

X. Regulatory Status

U.S. Federal Regulatory Status:
DOT Proper Shipping Name = Sodium Hydroxide, liquid or solution; DOT Hazard Class = Corrosive Material; UN 1824;

Sodium Hydroxide is subject to regulations under § 311 of the Clean Water Act and the Hazardous Materials Transportation Act.

Sodium Hydroxide is classified as a "Hazardous Substance" under the "SUPERFUND" Act which requires that the National Response Center (Phone 800/424-8302) be notified immediately if 1000 pounds or more is released into the environment. Clean-up of accidental spills must be promptly initiated.

XI. Additional Information

Permissible Concentration References:	ACGIH Threshold Limit Values, (1981); OSHA Standard, 29CFR, Part 1910.1000 (1980)
Toxicity:	Sax, NI, Dangerous Properties of Industrial Materials. 4th Edition, (1975)

HCC SUBSTANCE NO. M-433 **DATE** 9/82 ☐ **NEW** ☒ **REVISED**
For more information write: